

## CHAPTER 143. MONITOR COCKPIT VOICE RECORDERS

### SECTION 1. BACKGROUND

#### 1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

##### A. Maintenance:

- Ramp Inspection: 3627
- Spot Inspection: 3628
- Cockpit En Route Inspection: 3629

##### B. Avionics:

- Ramp Inspection: 5627
- Spot Inspection: 5628
- Cockpit En Route Inspection: 5629

**2. OBJECTIVE.** This chapter provides guidance in monitoring cockpit voice recorders (CVR) during spot, ramp, and cockpit en route inspections.

**NOTE: En route inspections are not allowed on aircraft operated on fractional ownership flights.**

**3. GENERAL.** Title 14 of the Code of Federal Regulations (14 CFR) requires that certain aircraft be equipped with a CVR that meets approved design and installation criteria. The regulations also stipulate that the data obtained from the CVR cannot be used in any civil penalty or certificate action.

**NOTE: This does not negate the aviation safety inspector's (ASI) authority and responsibility to monitor the CVR during the performance of airworthiness surveillance functions.**

*A. Requirements of CVR Maintenance Procedures.* The Avionics ASI is responsible for determining that the maintenance procedures ensure that tests are conducted according to procedures provided by the CVR manufacturer and should

include, at a minimum, listening to the recorded signals on each channel to verify that the audio is being recorded properly, is intelligible, and is free from electrical noise or other interference. For program managers, the tests should be part of their inspection or maintenance program.

*B. Monitoring the CVR.* There are no restrictions in the regulations that prevent periodic monitoring of the CVR as a method of surveillance.

(1) ASIs are cautioned against monitoring CVR tapes for any purpose other than determining the quality of the recording.

(2) Monitoring should be done only to the extent necessary to determine that the quality of reproduction and maintenance of the CVR is adequate.

*C. Acoustic Underwater Locator Beacon Maintenance.*

(1) To ensure the timely activation of underwater acoustic beacons associated with CVRs, Avionics ASIs should evaluate their certificate holder's or fractional ownership manager's (hereafter referred to as the program manager) maintenance and inspection programs to ensure that procedures for testing beacons, conducted concurrently with battery replacement, provide for functionally testing the beacons before replacing the old battery.

(2) Operator's and program manager's maintenance or inspection programs should also be evaluated to ensure that operational testing is being accomplished, consistent with the recorder or beacon manufacturer's recommended procedures, at specified intervals and, when possible, in conjunction with a numbered or phase inspection (e.g., "A," "B," or "C" check).

(3) These requirements must be reflected on work cards or other inspection cards to ensure system-wide compliance.

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## SECTION 2. PROCEDURES

### 1. PREREQUISITES AND COORDINATION REQUIREMENTS.

#### A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR parts 91, 121, 125, and 135, as applicable
- Experience with the equipment being inspected
- Successful completion of the Airworthiness Inspector Indoctrination course(s) or equivalent

B. *Coordination.* This task requires coordination with the operator or program manager.

### 2. REFERENCES, FORMS, AND JOB AIDS.

#### A. References (current editions):

- Order 8300.10, Volume 3, Chapter 2, Conduct Spot Inspection of Operator's/Fractional Ownership Program Manager's Aircraft
- 8300.10, Vol. 3, Ch. 3, Conduct Ramp Inspection of Operator's/Fractional Ownership Program Manager's Aircraft
- 8300.10, Vol. 3, Ch. 4, Conduct Cockpit En Route Inspection

#### B. Forms:

- FAA Form 8430-13, Request for Access to Aircraft

#### C. Job Aids:

- JTAs: 2.2.4, 2.3.1, 2.3.4

### 3. PROCEDURES.

A. *Initiate the Inspection.* Reference vol. 3, ch. 2, 3, or 4, as applicable.

B. *Monitor the CVR.*

(1) If this task is being done as part of an en route inspection, obtain permission from the pilot-in-command before plugging into the CVR system.

**NOTE: Be aware that not all phone jacks on CVR cockpit monitors are wired for operation.**

(2) If this task is being done as part of a spot or ramp inspection, accomplish the following:

(a) Coordinate with the maintenance supervisor before conducting the inspection; and

(b) Monitor the in-progress maintenance to ensure that the CVR is being evaluated for performance of its intended function. Check all channels to ensure that the audio is being recorded properly, is intelligible, and is free from electrical noise or other interference.

(3) Monitor the cockpit area microphone to ensure that it satisfactorily picks up all cockpit audio.

**NOTE: Be aware that the quality of reproduction of some CVRs can be affected by ground operation of auxiliary power units and ground power units.**

(4) Review the certificate holder's or program manager's maintenance procedures for acoustic underwater locator beacons to ensure that the manufacturer's recommendations are closely followed, including the procedures for the battery check.

C. *Analyze Results.* Refer to vol. 3, chs. 2, 3, or 4, as applicable.

### 4. TASK OUTCOMES.

#### A. Complete PTRS.

B. *Complete Tasks.* Refer to vol. 3, chs. 2, 3, or 4, as applicable.

**5. FUTURE ACTIVITIES.** Followup activities, as required.

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